# Service Manual

Overhead Console Type Hi-Fi Car Audio System

RM-310

(2 CH) 10 Watts per channel

(4 CH) 4 Watts per channel

channels driven, from 60 to 20,000 Hz with no more than 5%

(2 CH) Total 46 Watts RMS

(2 CH) 0.25% at -3 dB at Rated

(2 CH) 15 to 20,000 Hz, ±3 dB at

(2 CH) 80 dB (A-Weighted)

 $250 \text{ Hz} \pm 6 \text{ dB}, -10 \text{ dB}$ 

total harmonic distortion.

23 Watts per channel (4 CH) Total 28 Watts RMS

7 Watts per channel

Power, 1,000 Hz

 $50 \, \text{Hz} \pm 10 \, \text{dB}$ 

 $10 \, \text{kHz} \pm 10 \, \text{dB}$ 

100 Hz +8 dB

1 Watt

Specifications are subject to change without notice.

power into 4 ohms, all

minimum continuous average

distortion.

minimum continuous average

power into 4 ohms, both channels

driven, from 30 to 20,000 Hz with

no more than 1% total harmonic



Rated Power Output:

Max. Power Output:

Frequency Response:

Signal to Noise Ratio:

Distortion:

Tone Control:

Loudness:

General

DC 12 V (11-16 V usable) Power Source:

Negative ground only

Test Voltage:

14.4 V

Power Consumption: Dimensions:

4.5A at rated power output 708 (L)×219 (W)×41 (D) mm

 $(27\frac{7}{8}"\times 8\frac{5}{8}"\times 1\frac{5}{8}")$ Cassette Deck Section Depth

68 mm (2<sup>11</sup>/<sub>16</sub>")

Weight:

3.6 kg (7 lb 15 oz)

**FM Tuner Section** 

88-108 MHz Frequency Range:

Usable Sensitivity:

50 dB Quieting

16 dBf (1.7 μV/75 ohms)

Sensitivity:

18 dBf (2.2  $\mu$ V/75 ohms) 73 dB (A-Weighted)

Signal to Noise Ratio: 60 dB

Image Rejection:

IF Rejection: 95 dB

RF IMD Rejection:

Frequency Response:

80 dB

30-15,000 Hz (±3 dB)

Stereo Separation: 35 dB at 1,000 Hz

**AM Tuner Section** 

Frequency Range: Max. Sensitivity:

525-1610 kHz (571~186m) 23 dB (at 500 mW output)

Selectivity:

35 dB (±10 kHz)

**Cassette Deck Section** 

Wow and Flutter: Cross-Talk: 55 dB

0.15% (WRMS)

Signal to Noise Ratio:

Frequency Response:

55 dB (A-Weighted) 45-12,000 Hz (±3 dB)

Stereo Separation:

40 dB at 1,000 Hz

## Matsushita Electric Trading Co., Ltd.

# P.O. Box 288, Central Osaka, Japan

## SPECIAL FEATURES

#### **Tuner Section**

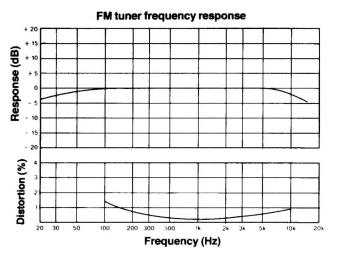
- ●FM/AM/FM Stereo Tuner
- Tuning Optimizer LED Indicators
- •FM Stereo Auto/Mono Switch and Stereo Indicator
- ●DX/Local Sensitivity Selector
- Muting Circuit on FM
- ●Built-in INQ (Impulse Noise Quieting) Circuit
- •3 Station Guides on Tuning Dial

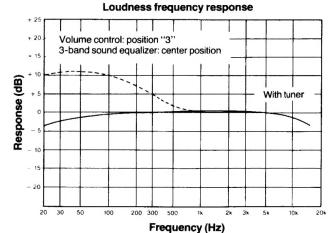
#### **Cassette Deck Section**

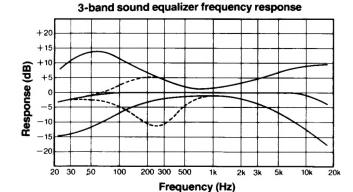
- •Repeatrack Cassette Player System
- Locking Fast forward and Rewind Auto Eject System when Ignition Key is Off

#### **Audio Amplifier Section**

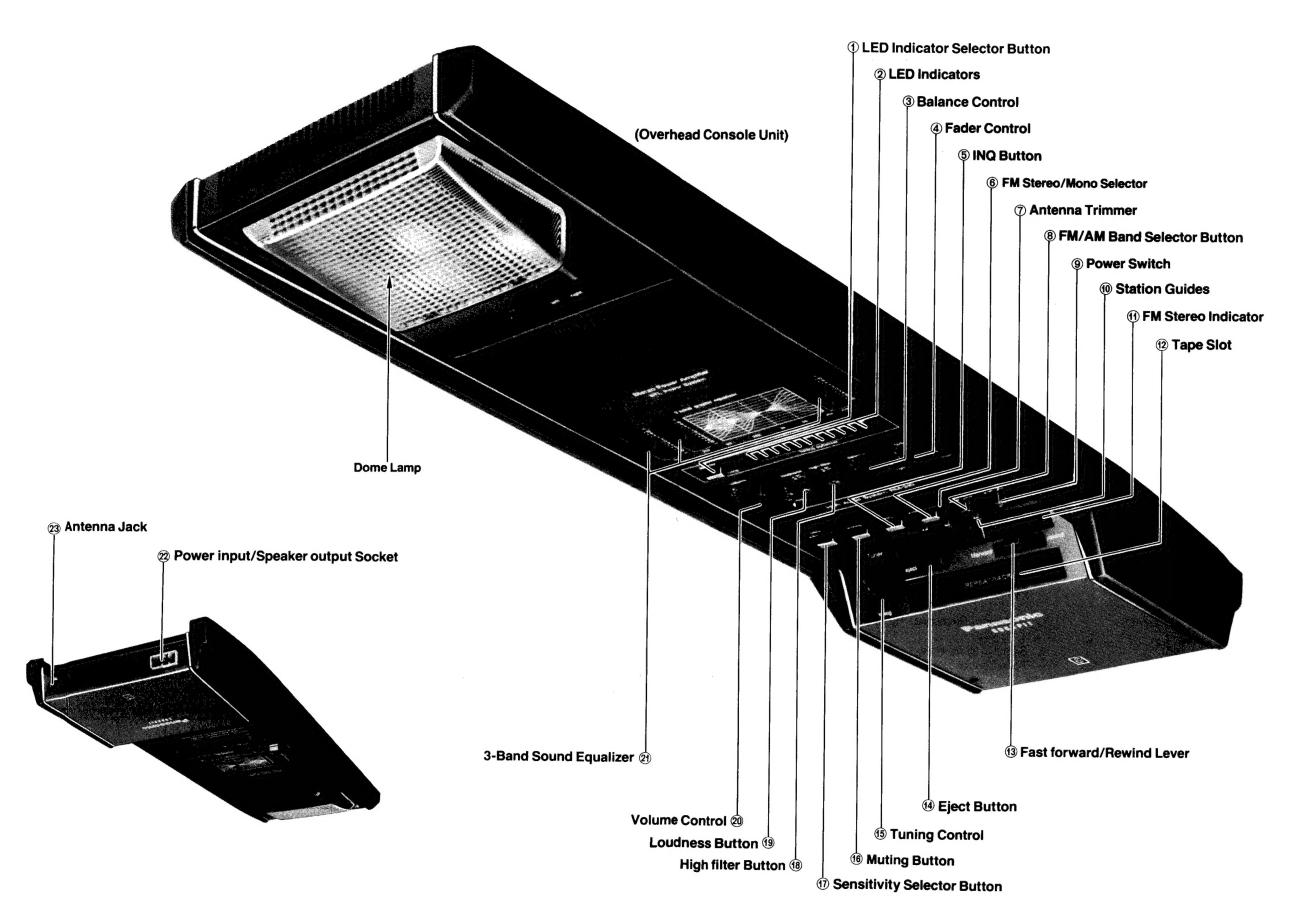
- •3-Band Sound Equalizer with Center-detent
- ●10 LED Output Power Indicator
- Balance and Fader Controls with Center-detent
- Loudness and High filter Switches
- Volume Control with 21 Detents
- Power Amplifier built into Console Unit
- •20 Watts (RMS) Total Output Power







# **CONTROLS AND FUNCTIONS**



#### 1 LED indicator selector button

- ●For tape play set this button to "level" (■).

  The output level of the left and right speakers is indicated by the flashing of the LED indicators ②. When the button is set to the "tuning" (■), only the center section (red) lights.
- For radio reception, first set the button to "tuning" (■) and then tune in the station. If the button is set to "level" (■) after tuning, the output level will be indicated by the flashing of the LED indicators just as with tape play.

#### 2 LED indicators

These indicators are coupled with the LED indicator selector button ① and it lights as follows.

#### Tape playback

LED indicator selector button ①	Lighting mode	
level (▲)	This always lights.  O O O O O O O O O O O O O O O O O O O	

#### Radio reception

LED indicator selector button ①	Lighting mode	
level (▲)	Lights only during reception.  O O O O O O O O  These light in accordance with output level strength.	
tuning( <b>.</b> )	This lights when tuning.  These light if tuning shifts to the left.  Rotate Tuning Control (and adjust so that center red indicator only lights.	

#### 3 Balance control

When this control is turned to the left, the sound volume heard through the left speaker increases and when turned to the right, the sound volume heard through the right speaker increases. The sound heard through both the left and right speakers is the same when the control is set to its center detent position.

#### 4 Fader control

When using a 4-speaker system, use this control to attain a balance of sound between the front and the rear speakers.

Make sure that the control is set in the center position if you have only a 2-speaker system.

#### ⑤ INQ button

Use this button to suppress ignition and pulse-like noise. If the signals are weak, set the button to "off".

#### 6 FM stereo/mono selector button

- Depress this button to set it in the "auto st" position (LED lights up), for normal operation.
- A stereo program will be automatically come through in stereo and a mono program will be automatically come through in mono.
- •If the signals from the broadcasting station are weak, set the button to "mono" (LED goes off) in order to reduce the amount of noise. In such cases, a stereo program is also heard in mono and the FM Stereo indicator (f) does not light up.

#### ⑦ Antenna trimmer

This is the antenna trimmer for AM reception only. After installing and connecting it, adjust it optimally.

#### 8 FM/AM band selector button

Set this button to your desired radio band; FM or AM.

#### 9 Power switch

Depress this button to "on" (=), power is supplied to all the components except the cassette deck.

Cassette deck power comes on when tape is inserted.

#### **10** Station guides

Move the guides and preset them to the positions on the tuning dial where your favorite stations are located. They will then help you to tune in the stations more easily.

#### (f) FM stereo indicator

This lights up when the FM stereo/mono selector button (a) is set to "auto st" and when a stereo broadcast is received.

When the FM stereo/mono selector button is set to "mono", the indicator will not light up even when a stereo broadcast is being received, and the stereo broadcast will be received in mono.

#### 12 Tape slot

Insert the cassette tape into this slot. Make sure that the exposed side of the tape is inserted first.

#### (13) Fast forward/rewind lever

#### Fast forward

Move the lever to the left (f. forward). When the tape has been wound forward at high speed, and reaches it's end it will be automatically ejected.

#### Rewind

Move the lever to the right (rewind). When the tape is rewound to it's beginning, tape play will start automatically.

#### **4** Eject button

Depress this button to eject the cassette tape. The tape will then be automatically ejected and the power switched off. However, if the Power switch ® is set to "on", operation will be automatically switched over to radio operation.

#### (5) Tuning control

Use this control to tune in your favorite stations. When a station has been tuned in properly, only the center (red) part of the LED indicator @ lights. (LED indicator selector button "tuning").

#### **16 Muting button**

Use this to suppress interstation noise (noise heard between FM broadcasting stations).

#### 17 Sensitivity selector button

Keep this button normally in the "DX" (■) position. In areas where the signals are strong, the sound may be distorted or there may be interference. In this case, set the button to "local" (■).

#### (8) High filter button

Set this button to "on" (a) when playing back a tape which has been recorded with the Dolby system and when a reduction in the amount of tape hiss and other high-frequency range noise is desired.

#### (9 Loudness button

At low volume levels, the response of the human ear primarily in the mid range area, and response to low frequency is poor. As the volume level increases the response levels off, and the low and mid range are heard with equal loudness. The loudness control in this unit is designed to compensate for this human deficiency, by boosting the bass end of the audio spectrum at low volume levels, and gradually diminishing the boost as the volume control is advanced. At a volume control setting of 5 or higher the frequency response is essentially flat.

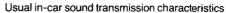
#### 20 Volume control

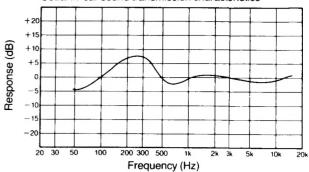
Use this to adjust the volume to the preferred level.

#### 2 3-band sound equalizer

Use this to adjust the sound to the tone quality of your preference, bearing in mind that the acoustics inside a vehicle differ according to the interior decor and other factors.

When each of the knobs is slid toward "+", the sound is emphasized and when slid toward "-", the sound is reduced. Normally, the acoustic response inside a vehicle is such that the frequencies neighboring 250 Hz tend to be emphasized and the bass sound uncontrolled. In cases like this, move the "250 Hz" control toward "-" and once this imitation bass sound is reduced, the real bass will appear to be balanced.





#### Power input/Speaker output Socket

Plug in the supplied inter connection harness. These are used to connect the overhead console unit's power input, and also for the speaker output cords.

#### 23 Antenna Jack

Plug in the supplied antenna lead plug and connect its to car antenna.

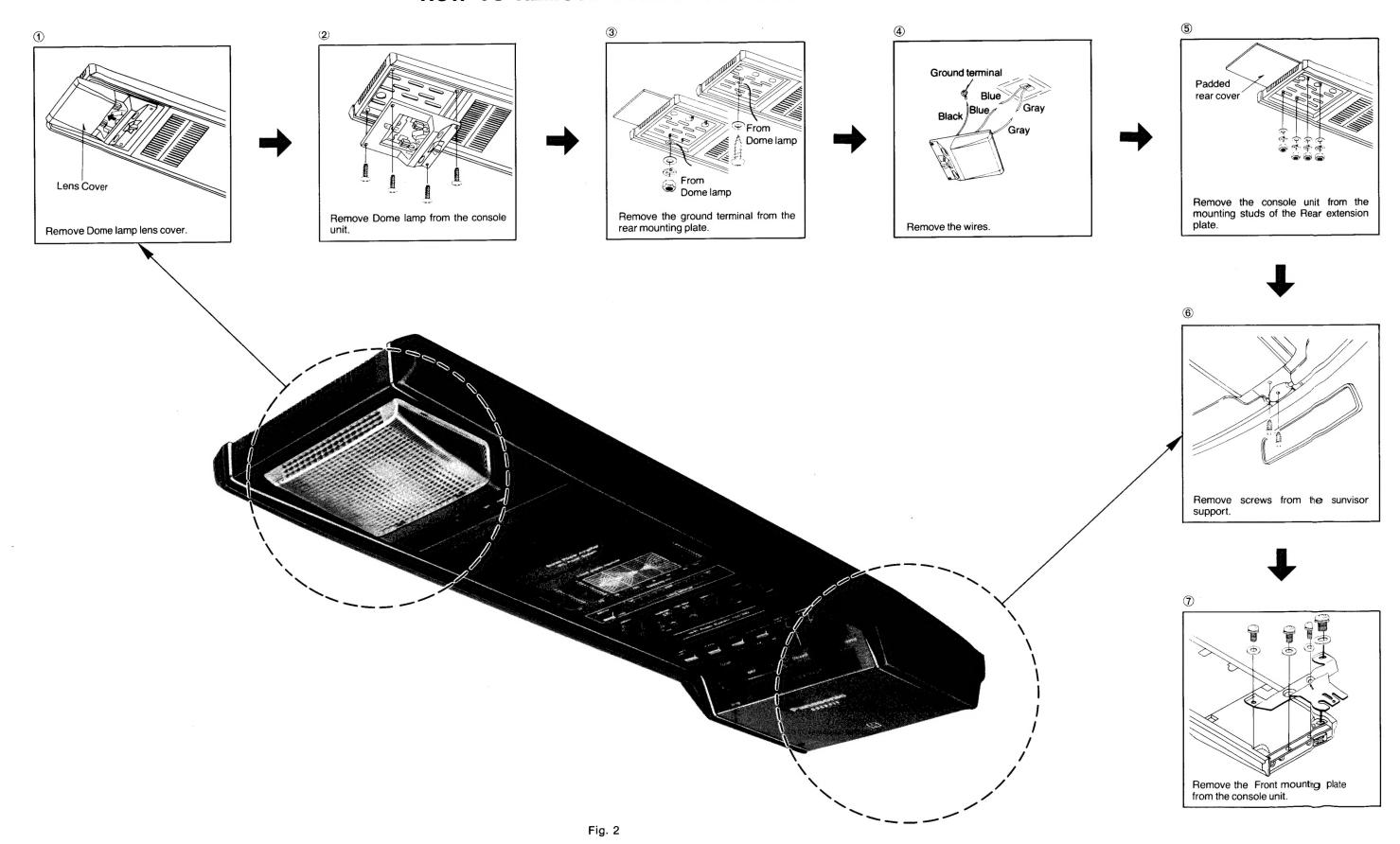
## Power amplifier protection circuit

The power amplifier contains a protection circuit to safeguard the unit from damage.

It cuts off the main amplifier's circuits automatically, when the speaker leads or terminals are shorted. (The FM/AM tuner, cassette deck and preamplifier continue to function normally.)

If there is no sound even when the Volume control @ is rotated clockwise and the LED indicator © lights up, this circuit may have been actuated. Switch the power off and check the speaker connections before switching the power on again.

# HOW TO REMOVE OVER-HEAD CONSOLE UNIT FROM THE ROOF



# **DISASSEMBLY INSTRUCTIONS**

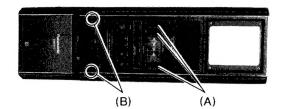


Fig. 3

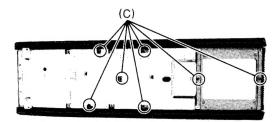


Fig. 4

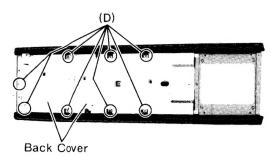


Fig. 5

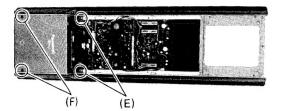


Fig. 6

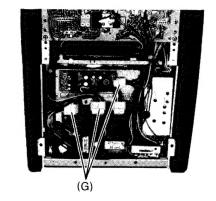


Fig. 7

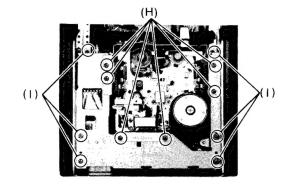


Fig. 8

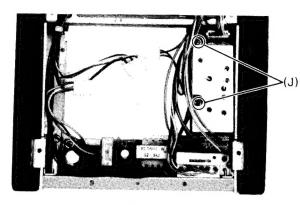


Fig. 9

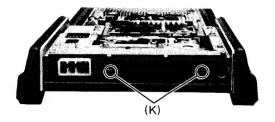


Fig. 10

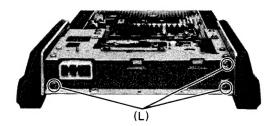


Fig. 11

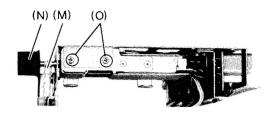


Fig. 12

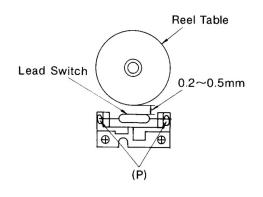


Fig. 13

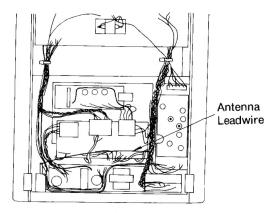


Fig. 14

Procedure	To remove—.	Remove—.	Shown in Fig.—.
1		Knobs(A) ×3	3
2		Screws (3 x 16)(B) x 2	3
3	Front Panel,	Red Screws (3 x 12)(C) x 7	4
4	Deck Cover	Screws (3×6)(D)×8	5
5	and Back Cover	Red Screw (3×8)(E)×2	6
6		Screw (3 x 10)(F) x 2	6
7	0	Sockets(G) x 3	7
8	Cassette Deck *1	Red Screws (3 × 6)(H) × 6	8
9		Screws (3×8)(I)×6	8
10		Screws (3 × 6)(J) × 2	9
11	Dial Chassis	Screws (3 × 8)(K) × 2	10
12		Screws (3 × 8)(L) × 3	11
13		Dial Cord(M)	12
14	Tuner *2	Knob(N) × 1	12
15		Screws (3 x 5)(O) x 2	12
16	Lead Switch #3	Unsolder(P) x 2	13

- \*1. Please treat the leads as shown in Fig. 14.
  \*2. Refer to dial threading.
  \*3. Keep a gap (0.2~0.5 mm) as shown in Fig. 13.

# **DIAL THREADING**

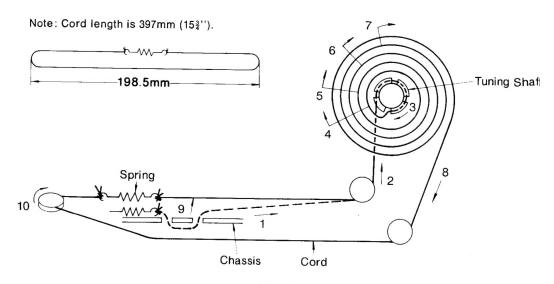
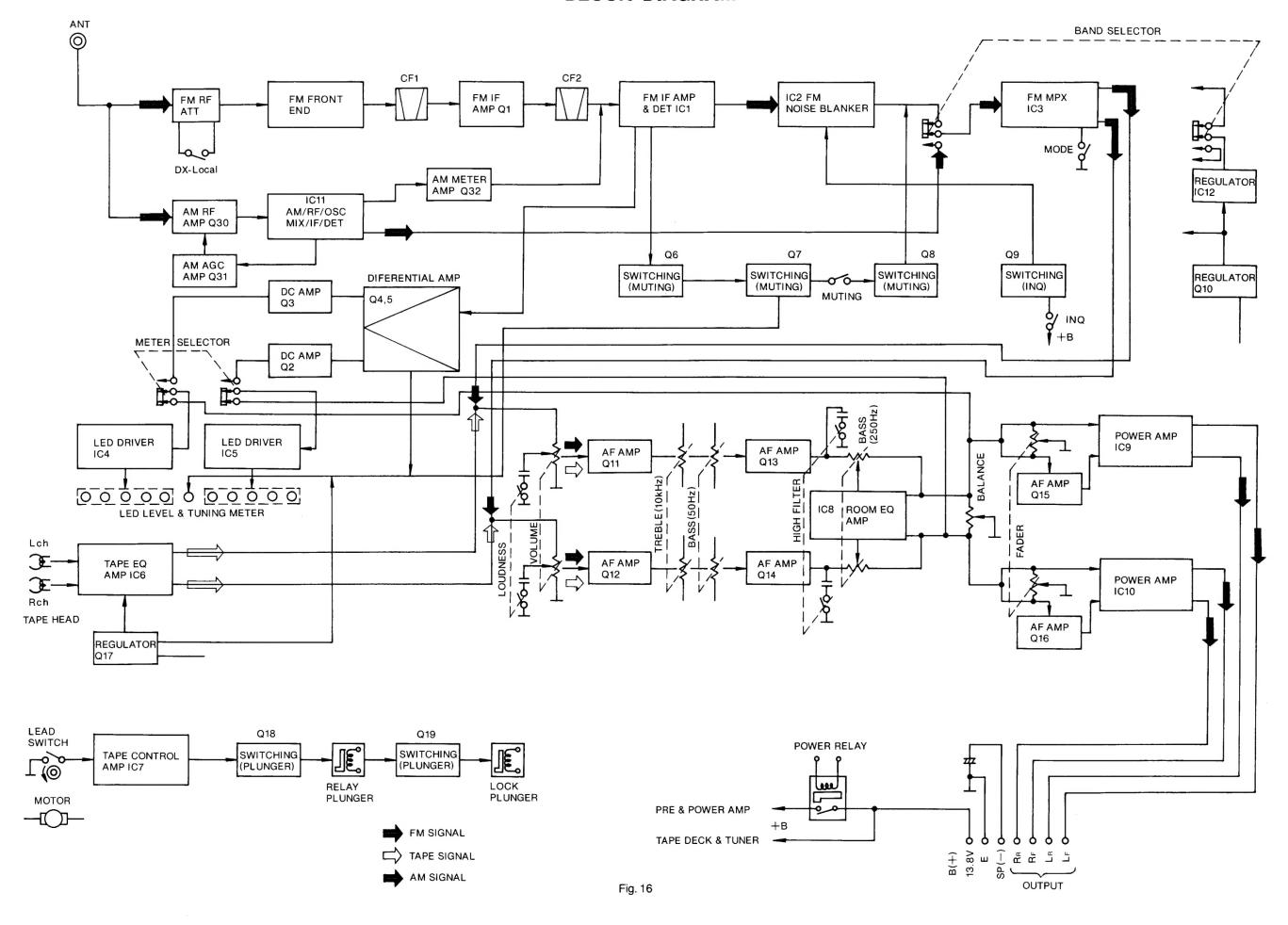


Fig. 15

# **BLOCK DIAGRAM**



#### **TUNER ALIGNMENT**

- 1. Set power switch to on.
- 2. Set sensitivity switch to DX.
- 3. Set stereo auto switch off or on...(separation alignment only)
- 4. Set muting switch to off or on...(pilot alignment only)
- 5. Set INQ switch to off.
- 6. Set band switch to AM or FM.
- 7. Set loudness switch to off.

- 8. Set high-filter switch to off.
- 9. Set selector switch to tuning.
- 10. Set equalizer to center.
- 11. Set balance and fader to center.
- 12. Set volume to 500 mW.
- 13. Set power source voltage to 13.8 V DC.

#### AM ALIGNMENT (See Figs. 17, 18)

	SIGNAL GENERATOR or SWEEP GENERATOR		DIAL INDICATOR (VTVM or SCOPE)		REMARKS
CONNECTIONS	FREQUENCY	SETTING	SETTING (VTVM or SCOPE) A		REMARKS
Positive side to point ▼.	455 kHz	Point of non- interference.	Positive side to point . Netagive side to point .	T <sub>802</sub> (IFT) T <sub>803</sub> (IFT)	<ol> <li>Pull out T<sub>803</sub> to the top of bobbin.</li> <li>Adjust T<sub>802</sub> so that 455 kHz marker appears at the center. (Refer to Fig. 20.)</li> <li>Adjust T<sub>803</sub> for maximum amplitude.</li> </ol>
			AM-RF ALIGNME	NT	
Connect to antenna terminal through AM dummy antenna (Refer to Fig.19.)	520 kHz	Minimum frequency.	Output meter across speaker voice coil.	T <sub>BO1</sub> (OSC Coil)	Adjust for maximum output.
"	1400 kHz	Tune to signal.	"	CT <sub>801</sub> (Ant. Trim.) CT <sub>803</sub> (Ant. Trim.) CT <sub>804</sub> (Ant. Trim.)	Set CT <sub>801</sub> to center.     Adjust CT <sub>803</sub> and CT <sub>804</sub> for maximum output.
"	1680 kHz	Maximum frequency.	"	CT <sub>802</sub> (OSC Trim.)	Adjust for maximum output.

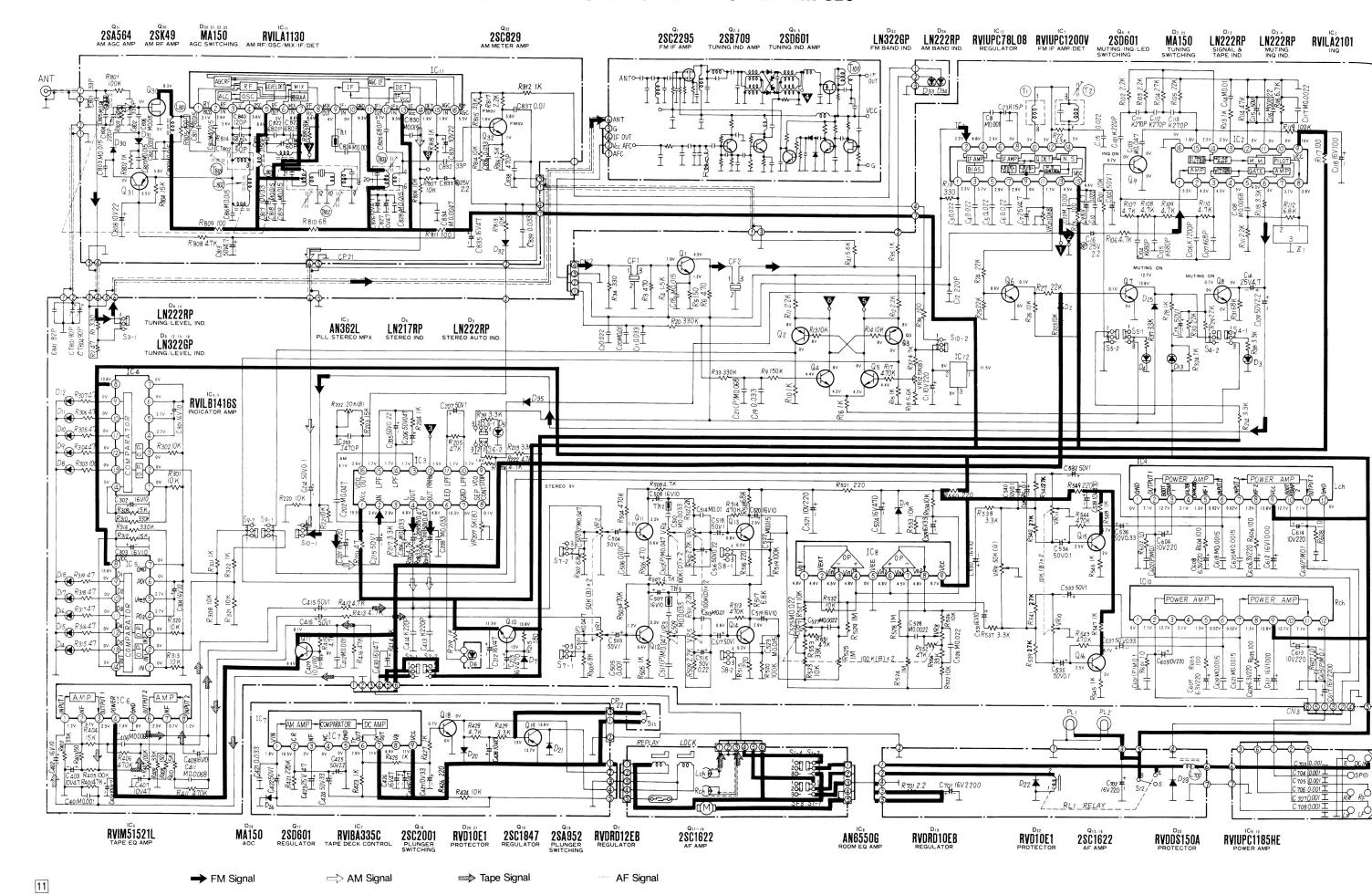
## FM ALIGNMENT (See Fig. 17)

SIGNAL GENER SWEEP GENER		DIAL SETTING	INDICATOR	ADJUSTMENT	REMARKS				
CONNECTIONS	FREQUENCY	SETTING (VIVINIOI SCOPE) ADJUSTMENT		SETTING (VIVM OF SCOPE) ADJUSTMENT		SETTING (VIVIOUS SCOPE) ADJUSTMENT		TTING (VTVM or SCOPE) ADJUSTMENT RE	
Apply signal thru. 0.001µF to point ♥ ground of SG to point ♥.	10.7 MHz (400 kHz SWP.)	Point of non- interference. (on/about 90 MHz).	Connect vert. amp. of scope to point ▼.	T <sub>101</sub>	<ol> <li>Set VR<sub>21</sub> minimum.</li> <li>Pull out T<sub>2</sub> and confirm that wave form should be normal.</li> <li>Adjust for maximum amplitude and proper linearity between ± 100 kHz markers. (Refer to Fig. 20.)</li> </ol>				
"	"	"	"	T <sub>2</sub>	Adjust T <sub>2</sub> so that 10.7 MHz marker appears at the center. (Refer to Fig. 21.)				
			MUTING ALIGNME	NT					
SIGNAL GENER SWEEP GENER		DIAL	DC VTVM	AD HISTMENT	DEMARKS				
CONNECTIONS	FREQUENCY	SETTING	DC VIVM	ADJUSTMENT	REMARKS				
Connect to antenna terminal through FM dummy antenna (Refer to Fig. 22.)	98 MHz (30% Mod.)	Tune to signal.	Output meter across speaker voice coil.	VR <sub>21</sub>	<ol> <li>Tune signal to obtain maximum output.</li> <li>Set signal generator output to 60 dB.</li> <li>Turn volume control so that DC VTVM reading becomes 0.45 V.</li> <li>Set signal generator output to -10 dB.</li> <li>Turn VR<sub>21</sub> so that DC VTVM reading becomes 0.017~0.022 V.</li> </ol>				

## LED METER ALIGNMENT (See Fig. 17)

SIGNAL GENERATOR or SWEEP GENERATOR		DIAL	DC VTVM	ADJUSTMENT	REMARKS
CONNECTIONS	FREQUENCY	SETTING	(Center 0)	ADJUSTMENT	HEMARKS
Connect to antenna socket through FM dummy antenna.	98 MHz	Tune to signal.	Positive side to point . Negative side to point .	VR <sub>12</sub>	Tune signal to obtain maximum output.     Set signal generator output to 60 dB.     Turn VR <sub>12</sub> so that DC VTVM reading becomes 0.

## SCHEMATIC DIAGRAM-MODEL RM-310



#### Reference:

Relation between terminal voltages of INDICATOR AMP, IC4 (IC5) and illuminated order of LED level meter.

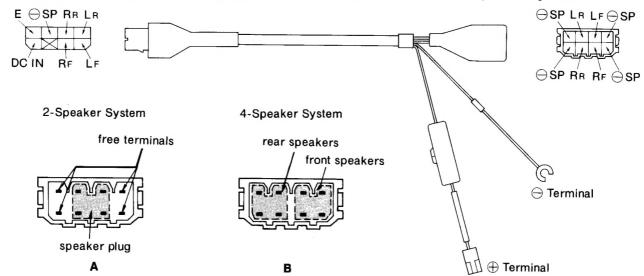
Illumina	ited order of LED	D12 (D18)	D11 (D17)	D10 (D16)	D9 (D15)	D8 (D14)
Terminal voltage of IC4 (IC5)	② in mV (input)	10	18	32	44	62
olta	9 in V	2.5	2.5	2.5	2.5	2.5
k (c	n V	0	2.5	2.5	2.5	2.5
ninal (IC5)	① in V	0	0	2.5	2.5	2.5
₽ 2	① in V	0	0	0	2.5	2.5
	① in V	0	0	0	0	2.7
Out	tput power in W	0.05	0.16	0.5	1	2

Each value shown in above table is merely a guide.

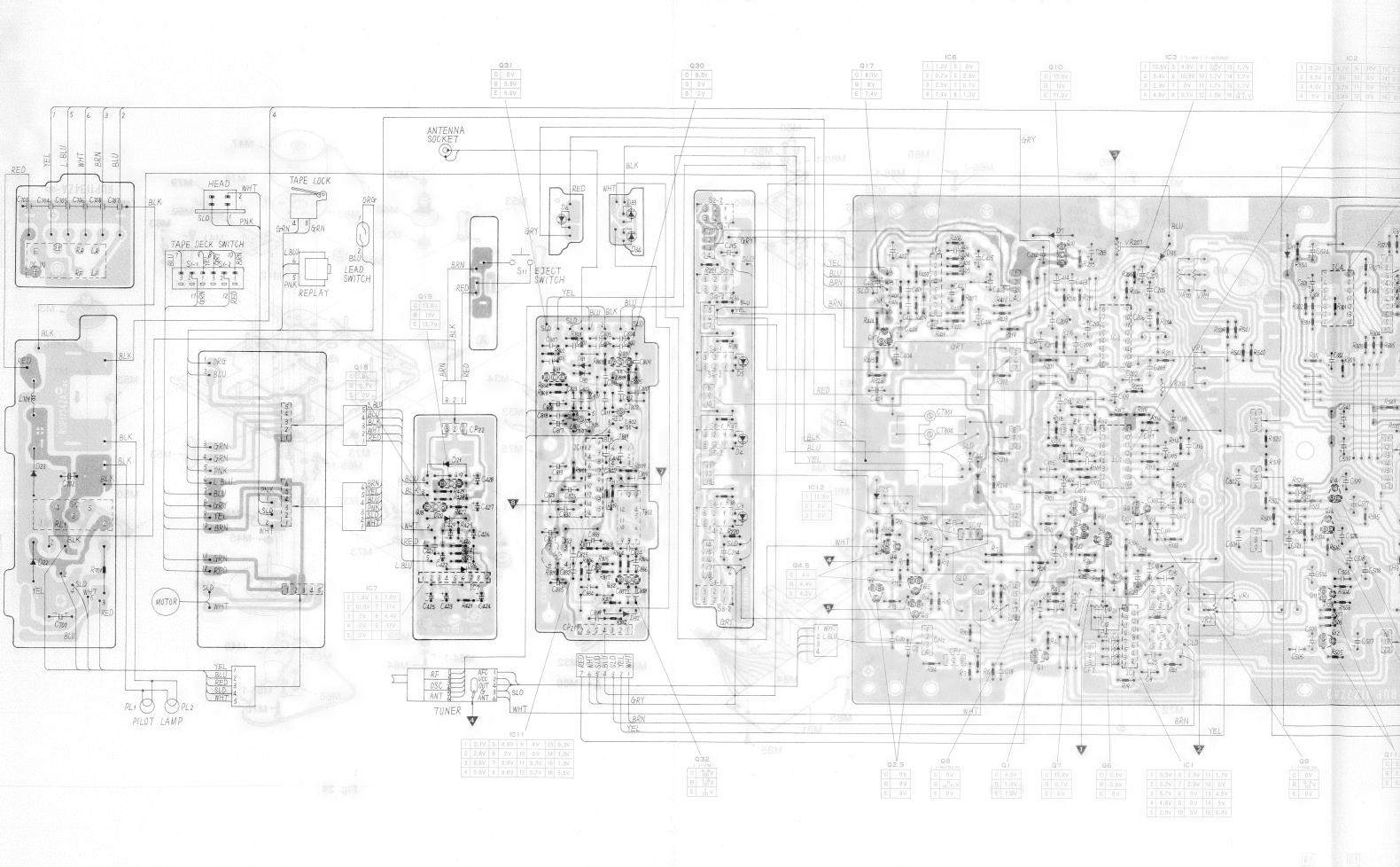
	910111213141516 9101112131411516	8 9 10 11 12 13 14 R 9 10 11 12 13 14	1 2 3 4 5 6 7 8	123456789
IC1	IC2,3	IC4,5	IC6	IC7
123456789	123.55.18.19.11.2		32	B E
IC8	IC9,10	IC11	IC12	Q1~9,11~17
E C B		Cathode	Cathode Anode	Anode
Q10	Q18,19,30~32	D1,2,7,19~22,25,26, 30~32	D3,4,5,8~18,33,34	D23

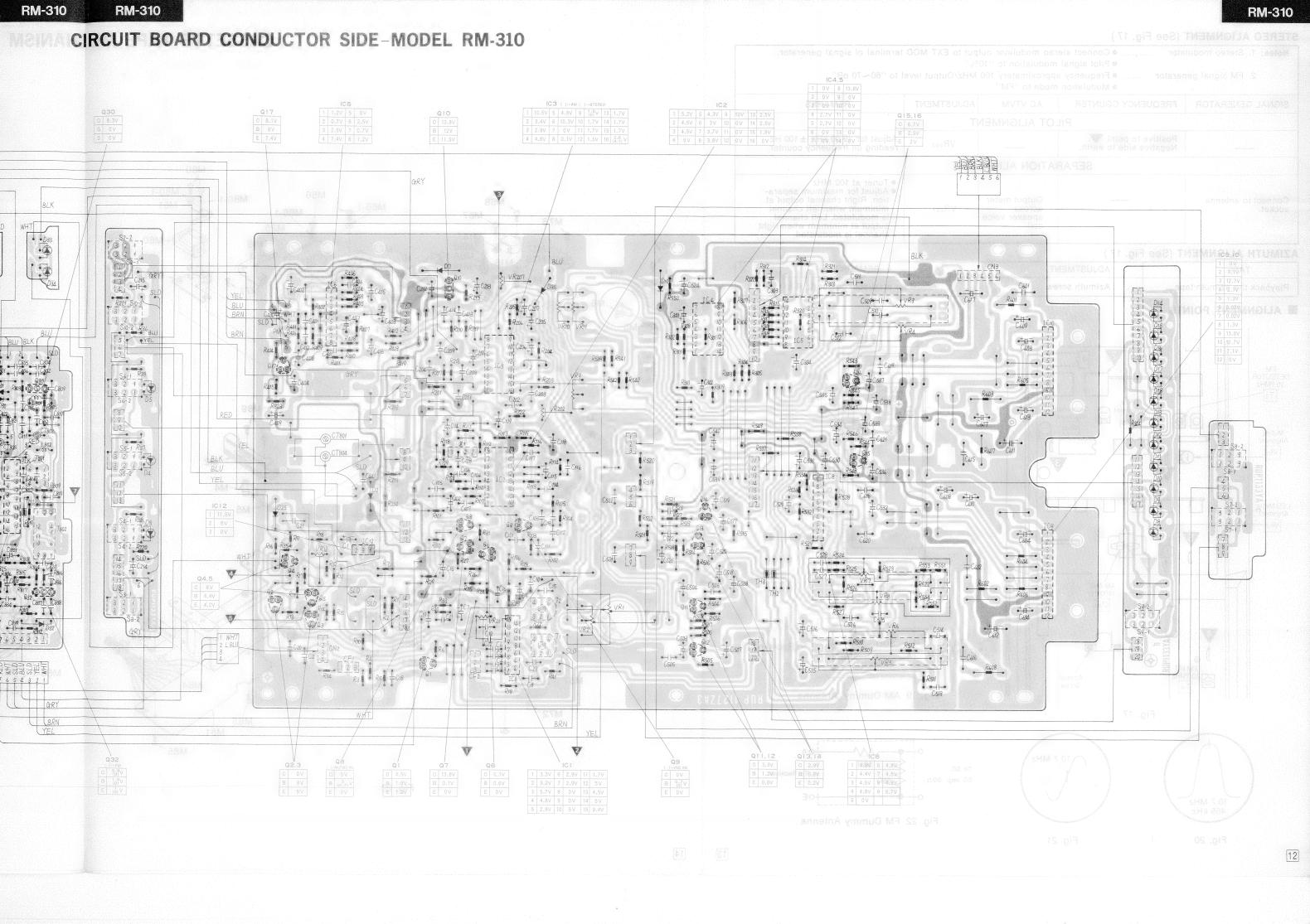
#### Notes:

- 1.  $S_{1^{-1}} \sim S_{1^{-4}}$ : Power switch for tape deck in "OFF" position. 8.  $S_{8^{-1}}$ ,  $S_{8^{-2}}$ : High-filter switch in "ON" position.
- 2.  $S_{2^{-1}}$ ,  $S_{2^{-2}}$ : Power switch for tuner in "OFF" position.
- 3.  $S_{3-1}$ ,  $S_{3-2}$ : Sensitivity selector switch in "DX" position.
- 4. S<sub>4-1</sub>, S<sub>4-2</sub>: Muting switch in "OFF" position.
- 5. S<sub>5-1</sub>, S<sub>5-2</sub>: INQ switch in "OFF" position.
- 6.  $S_{6-1}$ ,  $S_{6-2}$ : Stereo auto switch in "OFF" position.
- 7. S<sub>7-1</sub>, S<sub>7-2</sub>: Loudness switch in "OFF" position.
- 9. S<sub>9-1</sub>, S<sub>9-2</sub>: Meter selector switch in "Level" position.
- 10. S<sub>10-1</sub>, S<sub>10-2</sub>: Band selector switch in "FM" position.
- 11. S<sub>11</sub>: Eject switch in "OFF" position.12. S<sub>12</sub>: Relay switch in "OFF" position.
- 13. DC voltage measurements are taken with electronics voltmeter from between measured parts and ground.



## ORC. MAIN A CIRCUIT BOARD CONDUCTOR SIDE-MODEL RM-310





Notes: 1. Stereo modu	<ul><li>Pilot signal</li></ul>	modulation to "10	%''	terminal of signal generator.
2. FM signal ge	nerator ● Frequency ● Modulation	mode to "FM"	MHZ/Output leve	el to "60~70 dB"
SIGNAL GENERATOR	FREQUENCY COUNTER	AC VTVM	ADJUSTMENT	REMARKS
	PI	LOT ALIGNMEN	1T	
	Positive to point . Negative side to earth.		VR <sub>202</sub>	Adjust for 19.00 kHz ±100 Hz reading on frequency counter.
	SEPAI	RATION ALIGN	MENT	
Connect to antenna socket.		Output meter across speaker voice coil.	VR <sub>207</sub>	Tuner at 100 MHz Adjust for maximum separation. Right channel output at minimum when left channel is modulated. Left channel output at minimum when right channel is modulated.

AZIMUTH ALIGNMENT (See Fig. 17)

Fig. 20

TAPE	ADJUSTMENT	REMARKS
Playback the azimuth tape.	Azimuth screw.	Adjust for maximum output (L, R ch).

#### **ALIGNMENT POINTS**

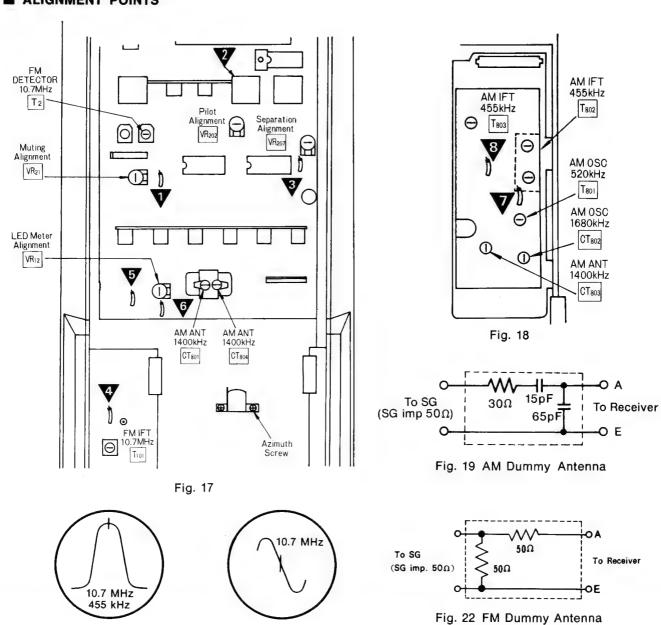


Fig. 21

# CASSETTE TAPE MECHANISM EXPLODED VIEWS

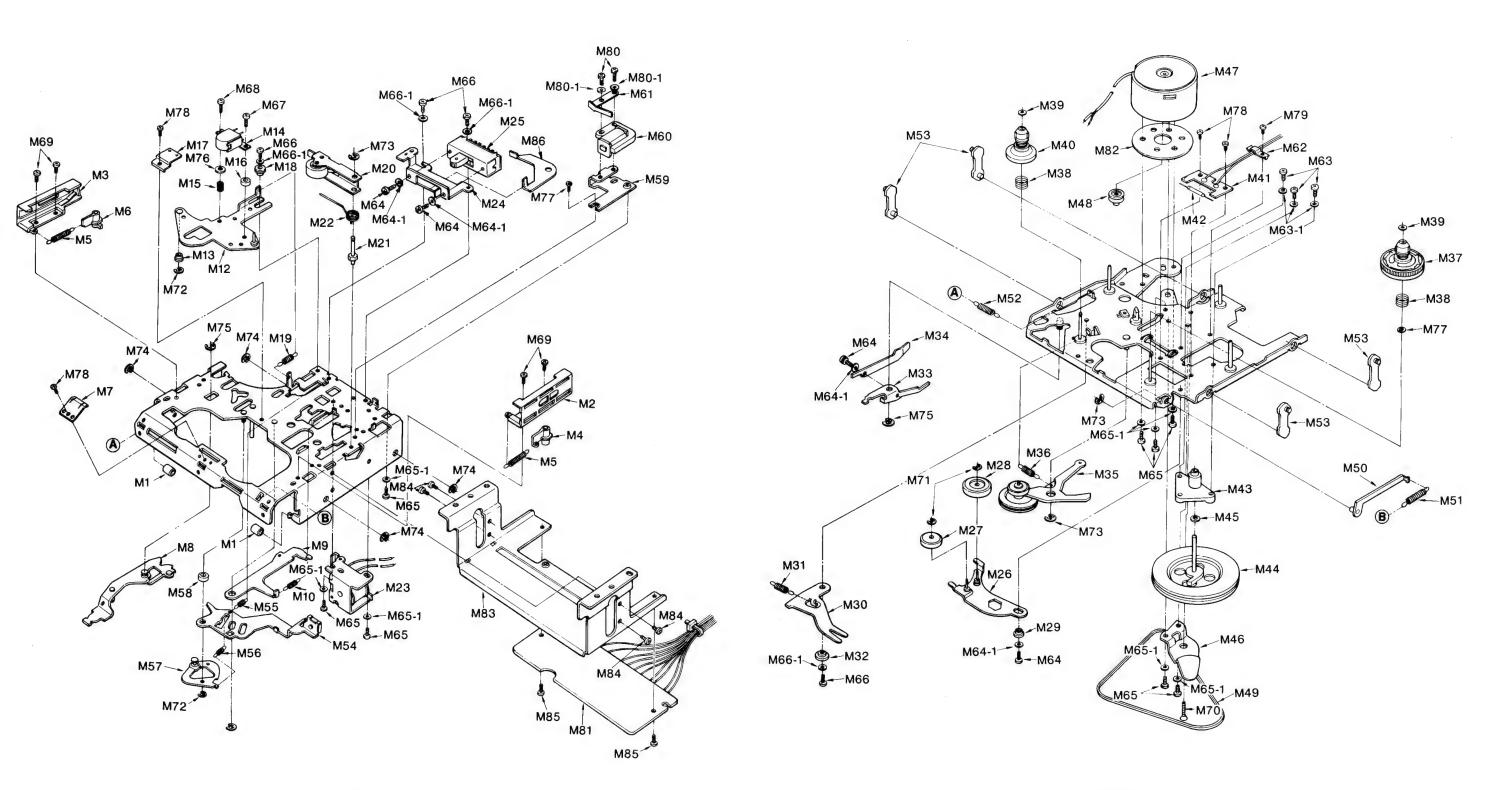
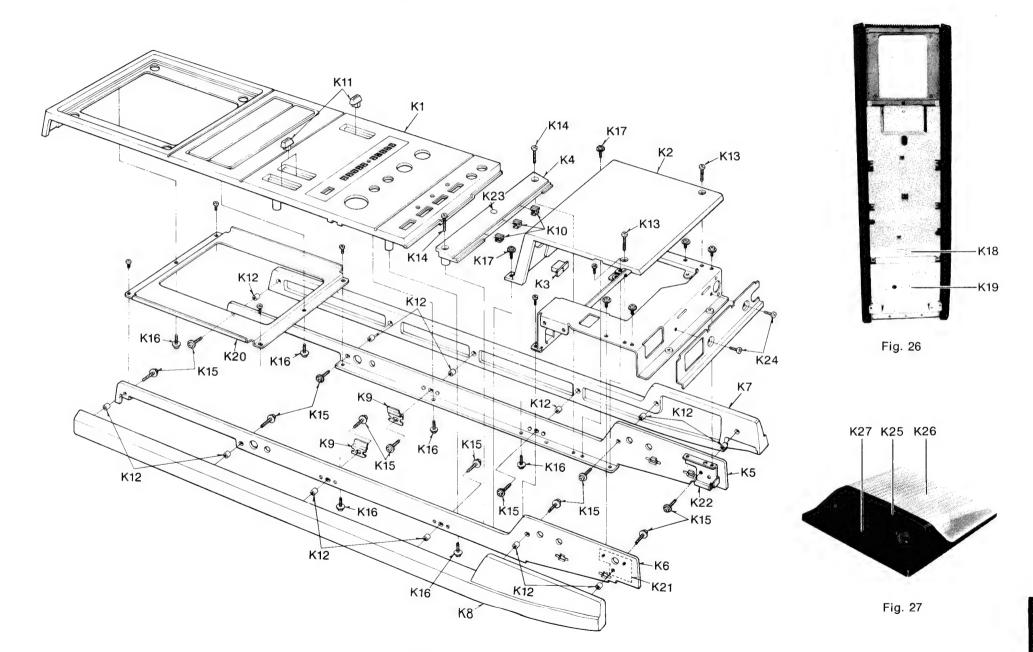


Fig. 23

Fig. 24

## **CABINET PARTS LOCATIONS**



## **CHASSIS PARTS LOCATIONS**

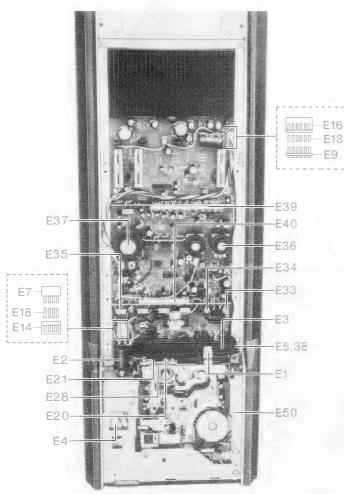


Fig. 28

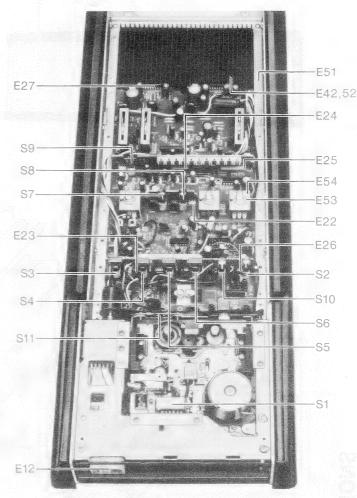


Fig. 29

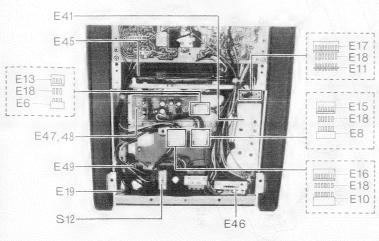


Fig. 30

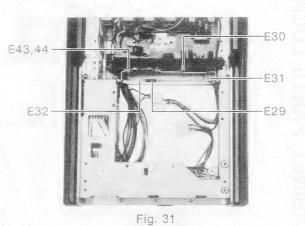
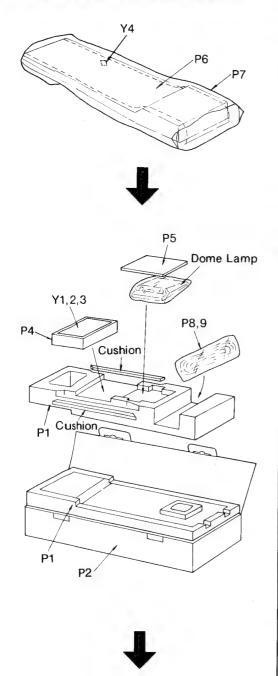
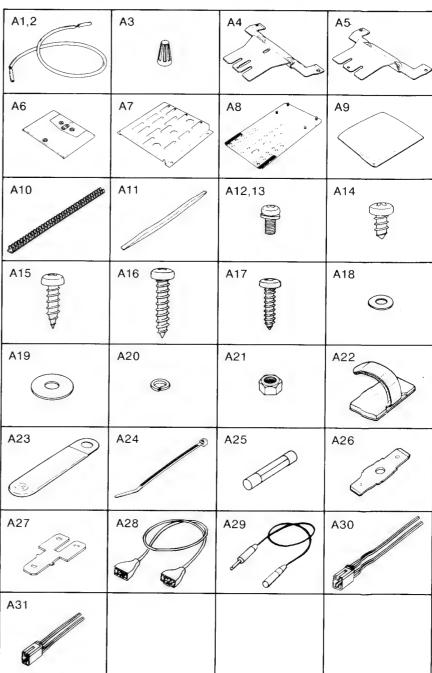


Fig. 32

# PACKING MATERIALS

# **OVER-HEAD CONSOLE UNIT ACCESORIES**





# **DOME LAMP ACCESSORIES**

A33

A32

АЗ

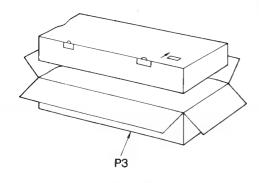


Fig. 33



## **TECHNICAL EXPLANATION**

## 1. Muting circuitry

The noise heard when an FM broadcast is detuned is especially irritating to hear, as is a broadcast station which has a high noise level because of insufficient reception input.

Model RM-310 is designed so that the FM AF signal is muted when reception input is insufficient and when it is tuned to a frequency between FM broadcast stations.

This function is performed by the muting circuitry described below.

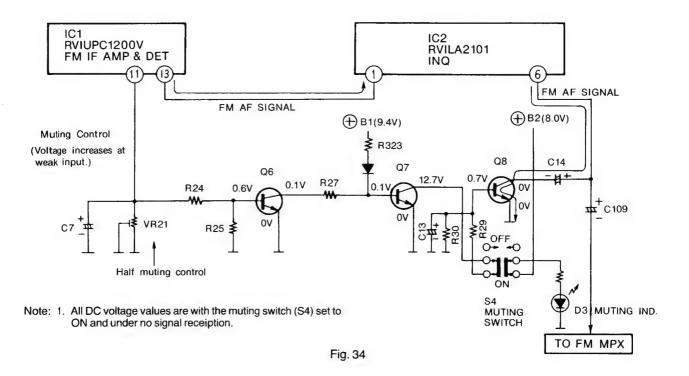
#### **Explanation of operation**

- (1) When, in the circuitry diagram shown below, the reception input begins to decrease, the muting-control voltage (detection of reception input level) of pin (f) of IC1 increases, is applied to the base of Q6, Q6 becomes on, and the collector potential of Q6 decreases.
- (2) Q7 becomes off when Q6 becomes on, and, as a result, the base potential of Q8 increases, causing Q8 to become on.
- (3) As a result, there is then a short-circuit between the collector and emitter of Q8, and the FM AF output from pin 

  of IC2 passes through the collector-emitter of Q8 to ground, thus resulting in the muting of the signal.

## Half-Muting Effect

The IC (PVIUPC 1200 V) for the FM IF amplifier and detector in the circuitry diagram below functions to reduce the noise level during reception of weak signals. This is useful to reduce the noise which occurs because of changes in the strength of the electric field when, for example, the vehicle passes between high buildings. (VR21 is a semi-fixed resistor for adjustment of operational sensitivity.)



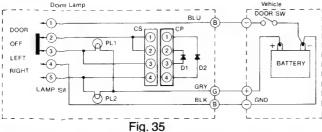
#### 2. Dome Lamp

The Dome Lamp included in the RM-310, when properly wired to the vehicle, maybe controlled in the following ways by switching.

- (1) The lamps illuminate only when the doors are opened
- (2) Only the lamp on the left side illuminates
- (3) Only the lamp on the right side illuminates
- (4) The lamps are off

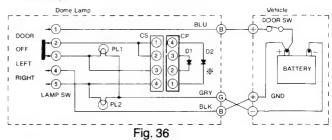
#### Method of wiring to the vehicle

For GM vehicles (with the door switch on the negative side of the battery)



Note: On some models, the positive line from the battery is not wired to the dome lamps. For these models, the positive line should be wired directly from the battery.

(2) For Ford vehicles (with the door switch on the positive side of the battery)



**Notes:** •On Ford vehicles, insert the diode plugs in the opposite direction (as indicated by the \*\* mark in the above figure).

 On some models, the negative line from the battery is not wired to the dome lamps. For these models, the negative line should be wired directly from the battery.

## REPLACEMENT PARTS LIST ...... Model RM-310

(RD81081902C2)

NOTES: 1. Important safety notice.

Components identified by A mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

2. The S mark indicates service standard parts and may differ from production parts.

Ref. No.	Part No.	Part Name & Description	Per Set	Remark
		MECHANICAL PARTS		
Ml	RFI4Z	Cushion	2	
M2	RFE17Z	Cassette Guide (R)	1 1	
KP.	RFE18Z	Cassette Guide (L)	l ī l	
44	RFE9Z	Push Arm (R)	l ī l	
M5	RFS37Z	Push Arm Spring	2	
46	RFE10Z	Push Arm (L)	1 1	
47	RFS38Z	Spring	1 1	
M8	RFY1Z	FF/Rewind Lever	1 1	
19	RFY2Z	Lock Arm	1 1	
M10	RFS39Z			
412		Lock Arm Spring	1	
413	RFY4Y	Head Plate	1	
	RFX1Z	Head Plate Spacer	1 1	
414	RJH2P1Z	Head	1	
415	RFS40Z	Head Spring	1	
416	RFX2Z	Head Spacer	1	
417	RFS41Z	Head Plate Spring	1	
418	RFX3Z	Head Plate Spacer	1	
419	RFS42Z	Head Plate Spring	1 1	
120	RFR1X	Pinch Roller	1 1	
121	RFD62Y	Pinch Roller Arm Shaft	1	
122	RFS43X	Pinch Roller Spring	1 1	
123	RFP9003Z	Plunger Assembly	l ī l	
124	RFD63Y	Switch Bracket	l ī l	
125	RFA8Z	Push Switch	ī	
126	RFY5Z	Idler Plate Assembly	l î l	
127	RFK1Z	FF Idler Assembly	ī	
128	RFK2Z	Take Up Roller Assembly	l i l	
129	RFX4Z	Idler Plate Metal	i	
130	RFY6Z	FF Plate	1 1	
131	RFS44Z	Spring	1	
132	RFX5Z	FF Plate Spacer	1 1	
133	RFY7Z	Print Spacer		
134	RFS45Z	Rewind Lever	1	
134		Rewind Action Spring	1 1	
	RFY8Z	Rewind Arm Assembly	1 1	
136	RFS46Z	Rewind Arm Spring	1	
137	RFJ1Z	Take Up Reel Table Assembly	1	
138	RFS47Z	Back Tension Spring	2	
139	RFN12Z	Washer	2	
140	RFJ2Z	Supply Reel Table Assembly	1	
141	RFT1Z	PC Board	1	
142	RFA9Z	Lead Switch	1	
z.4.3 IAA	DDD 10	Flywhoel Metal	1	
14 t	$\Sigma P T T T$	Flywheel	1 1	
145	RFN18Z	Washer	1 1	
146	RFD65Z	Flywheel Retainer	1	
147	MMS3NF2R	Motor	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
M48	RFQ5Z	Motor Pulley	1	
M49	RFB5Z	Belt	1	
M50	RFY9Z	Lift Plate Assembly	ī	
M51	RFS48Z	Lift Spring	l î	
M52	RFS49Z	Sub Chassis Spring	1	
M53	RFY10Z	Arm	4	
M54	RFY11Y	Lock Lever Assembly	li	
M55	RFS50Y	Spring	1	
M56	RFS51Y	Spring	1	
M57	RFY12Z	Lock Plate Assembly	i	
M58	RFX6Z	Lock Spacer	ı	
M59	RFD66Z	Core Bracket		
M60	RFD9004Z	Core Assembly	1	
M61	RFS52Z		1	
M62	RFD67Z	Spring	1	
		Cord Holder	1	
M63	XSN2+5	Screw	3	S
M63-1	XWA2B	Washer	3	S
M64	XSN2+4	Screw	4	S
M64-1	XWA2B	Washer	4	S
M65	XSN26+4	Screw	8	S
M65-1	XWA26B	Washer	8	s
M66	XSN26+5	Screw	4	S
M66-1	XWA2B	Washer	4	S
M67	XSN2+5	Screw	ĺ	S
M6'8	XSN2+8	Screw	1	S
M69	XSN26+4	Screw	4	S
M70	XSS26+11	Screw	1	5
M71	XUC12FT	Circlip	2	
M72	XUC15FT			S
M73	XUC2FT	Circlip	2	S
M74		Circlip	4	S
	XUC25FT	Circlip	4	S
M75	XUC3FT	Circlip	2	S
M76	XWG2	Washer	1	S
M77	RFN19Z	Washer	1	
478	XSBR2+2FZ	Screw	5	
479	XSB2+2FZ	Screw	1	
480	XSN26+6	Screw	2	S
180-1	XWA26B	Washer	2	S
181	RFT2Y	Circuit Board	1	
182	RFX7Z	Spacer	1	
183	RFD68Y	Bracket	1 1	
184	XSN3+3S	Screw	4	
485	XTN3+6B	Screw	2	S
M86	RFS123Z	Spring, Switch	ī	U
		INTEGRATED CIRCUITS,		
	DUTUDO: 0005	TRANSISTORS AND DIODES		
IC1	RVIUPC1200V	IC	1	
IC2	RVILA2101	IC	1	
tC3	AN362L	IC	1	
C4,5	RVILB1416S	IC	2	
C6	RVIM51521L	IC	1	
rC7	RVIBA335C	IC	ī	
IC8	AN6550G	IC	ī	
C9,10	RVIUPC1185HE	IC	2	
C11	RVILA1130	IC	1	
C12	RVIUPC78L08	ic		
21			1 1	
1	2SC2295	Transistor (Si)	1	

Dof. No.	Don't No.	Dord Many 0 Day 14	Per						Per	1
Ref. No.	Part No.	Part Name & Description	Set	Remarks	Ref. No.	Part No.	Part Name	& Description	Set	Remarks
Q2,3	2SB709	Transistor (Ge)	2		<sub>S2∿10</sub>	RSH2B09Y	Switch, Power,	Selector etc.	9	
Q4~9,17	2SD601	" (Si)	7		S12	RSL27Y	" Power		1	
Q10	2SC1847	" (Si)	1 1		11		DOME TAMP		1	
Q11∿16	2SC1622AD17	" (Si)	6			DWCMT 610M	DOME LAMP		1	
Q18	2SC2001	" (Si)	1		S13	RWSML610M	Switch, Lamp		1	
Q19	2SA952	" (Ge)	1				RESISTORS (Val	ue is in OHMS)		
Q30	2SK49	" (Si)	1		Rl	RRD18XK331	330 1/8W	Chip	1	
Q31	2SA564	" (Ge)	1		R2	RRD18XK470	47 "	"	1	
Q32	2SC829	" (Si)	1		R3	RRD18XK471	470	11	1	
D2,25,26	30,31,32,35		_		R4	RRD18XK152	1.5 k "	"	1	
	MA161	Diode (Si)	7	S	R5	RRD18XK151	150 "	"	1	
D3,4,5,8	,13,14,34		_		R6	RRD18XK471	470 "		1	
	LN222RP	LED (Ga)	7		R9	RRD18XK154	150 k "	**	1	
D6	LN217RP	(Ga)	1		R10	RRD18XK102	1 k "	"	1	
D7	RVDRD12FB	Diode (Si)	1	S	R11	RRD18XK222	2.2 k		1	
D9/012,15	.16∿18,33 LN322GP	TED (Ca)	9		R12	RRD18XK222	2.2 k "	и	1	
D19	RVDRD10EB	LED (Ga)	1		R13	RRD18XK103	10 k "	Ħ	1	
D20∿22	SM112	Diode (Si) " (Si)	3	s	R14 R15	RRD18XK103	10 k "	**	1	
D20-022	RVDDS150A	" (Si)	1	5	R16	RRD18XK102	1 k "	11	1	
D23	RVDDSIJUA	(31)	1		R17	RRD18XK102 RRD18XK474	470 k "	0	1	
		DOME LAMP			R18	RRD18XK562	5.6 k "	n	1	
D1,2	SM112	Diode (Si)	2	S	R19	RRD18XK331	330 "	11	li	
		COILS AND TRANSFORMERS			R20	RRD18XK334	330 k "	0	1	
L701	RLT6H6	Coil, Chock	1		R22	RRD18XK332	3.3 k "	**	li	
TI	RLOM3301	Coil, IF	ı		R23	RRD18XK101	100 "	н	1	
T2	RLI4M101	IFT, FM	1	s	R24	RRD18XK223	22 k "	**	li	
T801	RLO2M20	Oscillator Coil, AM	1	5	R25	RRD18XK223	22 k "	n	1	
T802	RLI7W104P	IFT, AM	ī	s	R26	RRD18XK103	10 k "	"	î	
T803	RLI 2M204	" "	1	s	R27	RRD18XK223	22 k "		1	
					R28	RRD18XK102	1 k "	11	ī	
7701 0	DEWIND A O L LD E A	VARIABLE RESISTORS	-		R29	RRD18XK223	22 k "	**	1	
VR1,2 VR3∿6	EWKHBA011B54	Variable Resistor, 50kΩ (B)	1 2		R30	RRD18XK223	22 k "	0	1	
VR7,8	EVBV18D10D15	" 100kΩ (D)			R31	RRD18XK683	68 k "	11	1	
VR9	EVBV17D10B15 EVHRQA518G54	" 100kΩ (B) " 50kΩ (G)	1 1		R32	RRD18XK472	4.7 k "	Ħ	1	
VR10,11	EWJ4EA011B14	" 10kΩ (B)	1		R33	RRD18XK334	330 k "	п	1	
VR12,207		" $5k\Omega$ (B)	2	s	R34	RRD18XK331	330 "	**	1	
VR21	EVNK4AA00B14	" 10kΩ (B)	1	S	R35	ERD25TJ102	1 k 1/4W	Carbon	1	S
VR202	EVNM4AA00B24	" 20kΩ (B)	ı	5	R36	ERD25TJ101	100 "	**	1	S
					R37	ERD25TJ332	3.3 k "	**	1	S
		VARIABLE CAPACITORS	+		R38	ERD25TJ332	3.3 k "	III-	1	S
CT801,	ECV1ZW90X32	Trimmer Capacitor	2		R39	ERD25TJ332	3.3 k "	79	1	S
804			-		R41	ERD25TJ562	5.6 k "	11	1	S
CT802,	ECV1ZW60X53N	п	2		R101	RRD18XK103	10 k 1/8W	Chip	1	
803					R102	RRD18XK222	2.2 k "	"	1	
		CERAMIC FILTERS			R103	RRD18XK222	2.2 K	"	1	
CF1,2	RVFGF10S12FR	Ceramic Filter	2		R104	RRD18XK272	2.7 k "	"	1	
		COMPONENT COMPINATIONS	-		R105	RRD18XK223	22 k "	"	1	
Z1	RXA1GYF064	COMPONENT COMBINATIONS	1		R106	RRD18XK472	4.7 k "		1	
21	RJE74Z	Component Combination	1 1		R107	RRD18XK472	4.7 k "		1	
1					R108	RRD18XK472	4.7 k "	11	1	
		THERMISTORS			R109 R110	RRD18XK472	4.7 k "	"	1	
Thl	RRT202	Thermistor	1		RIII	RRD18XK472		"	1	
Th2,3	RRT302	"	2		R111	RRD18XK222	2.2 k "	n		
	1	SWITCHES	+		R113	RRD18XK682	6.8 k "	11	1 1	
SI	RFA8Z	Switch, Tape Deck Power	1		KII3	RRD18XK102	1 k "	**	1	
	1	Durton, Tape Been Touch					1			<u> </u>

Ref. No.	Part No.	F	Part Name	& Description	Per Set	Remarks	Ref. No.	Part No.	Pa	art Name 8	2 Description	Per Set	Remarks
R114	RRD18XK473	47 k	1/8W	Chip	1		P412	DDD10vv470	A 7 1-	1 /053	ah i -	,	Angelog A
8776	ERD25TJ682	6.8 k	1/4W	Carbon	1 1	S	R412	RRD18XK472	4.7 k	1/8W	Chip	1	
117	RRD18XK101	100	1/8W	Chip	1	5	R413	RRD18XK472	4.7 k	**	n	1	
118	RRD18XK332	3.3 k	1/011	CHIP	1 1		R414	RRD18XK102	1 k			1	
2119	RRD18XK104	100 k	n				R415	RRD18XK472	4.7 k	11	11	1	
201	RRD18XK470	47	Ħ	U	1		R416	RRD18XK473	47 k	11	11	1	
203		1			1		R421	RRD18XK224	220 k	"	11	1	
204	RRD18XK153	15 k		"	1		R423	RRD18XK102	l k	11	11	1	
	RRD18XK102	1 k			1		R424	RRD18XK103	10 k	17	**	1	
205	RRD18XK473	47 k	11	ii .	1		R425	RRD18XK102	1 k	11	0	1	
206	RRD18XK472	4.7 k	n	Ħ	1		R426	RRD18XK221	220	11	II .	1	
210	RRD18XK472	4.7 k	17	**	1		R427	RRD18XK102	1 k	11	11	1 1	
211	RRD18XK472	4.7 k	17	"	1		R428	RRD18XK472	4.7 k	91	**	ī	
213	RRD18XK332	3.3 k	17	11	1		R429	RRD18XK332	3.3 k	11	II .	1	
214	RRD18XK332	3.3 k	19	11	1 1		R501	RRD18XK682	6.8 k	11	#	1	
215	RRD18XK181	180	11	11	1		R502	RRD18XK682	6.8 k	**	II .	1	
217	RRD18XK332	3.3 k	11	11	ī		R503	RRD18XK474	470 k	**	H	1 1	
218	RRD18XK332	3.3 k	ti	11	l i l		R504	RRD18XK474	470 k	11		1 1	
219	RRD18XK102	1 k	11	11	i		R505				"	1	
220	ERD25TJ103	10 k	1/4W	Carbon	1	s		RRD18XK471	470		9	1 1	
221	ERD25TJ103	10 k	11	ii arron	1		R506	RRD18XK471	470	11	"	1	
222	RRD18XK472	4.7 k	1/8W	Chip		S	R507	RRD18XK472	4.7 k			1	
301	RRD18XK103	10 k	T/0M	Curb	1 1		R508	RRD18XK472	4.7 k	0	IT	1	
302	RRD18XK103				1		R509	RRD18XK222	2.2 k	17	II .	1	
303		10 k	11		1		R510	RRD18XK222	2.2 k	. 11	11	1	
304	RRD18XK101	100		,, H	1		R511	RRD18XK223	22 k	"	17	1	
	RRD18XK470	47			1		R512	RRD18XK223	22 k	27	11	1	
305	RRD18XK470	47	"	11	1		R513	RRD18XK474	470 k		11	1	
306	RRD18XK470	47	11	11	1		R514	RRD18XK474	470 k	11	**	l î	
307	RRD18XK470	47	**	**	1 1		R515	RRD18XK221	220	13	n	i	
308	RRD18XK103	10 k	91	IT	1		R516	RRD18XK221	220	"	II .	i	
.309	RRD18XK153	15 k	11	**	1		R517	RRD18XK682	6.8 k	**	*1	1 1	
310	RRD18XK334	330 k	11	17	1		R518	RRD18XK682	6.8 k	11	P		
311	RRD18XK102	1 k	17	H	ī		R519	RRD18XK104	100 k			1	
312	RRD18XK153	15 k	11	11	ī		R520	1		11	"	1	
313	RRD18XK103	10 k	17	11	1 1			RRD18XK104	100 k			1	
314	RRD18XK334	330 k	11				R521	RRD18XK221	220			1	
315	RRD18XK101	100 K		17	1		R522	RRD18XK103	10 k	"	11	1	
316	RRD18XK470			II .			R523	RRD18XK103	10 k	"	"	1	
317		47		"	1		R524	RRD18XK105	1 M	n	11	1	
318	RRD18XK470	47		11	1 1		R525	RRD18XK105	1 M	ŧ	n	1	
	RRD18XK470	47		"	1		R526	RRD18XK103	10 k	11	"	1	
319	RRD18XK470	47			1		R527	RRD18XK103	10 k	11	**	1	
320	RRD18XK103	10 k		"	1		R528	RRD18XK105	1 M	11	n .	1	
321	RRD18XK103	10 k	*1	11	1		R529	RRD18XK105	1 M	11	#	ī	
322	RRD18XK102	1 k	11	ti	1 1		R532	RRD18XK103	10 k	11	n	i	
323	RRD18XK103	10 k	**	II .	1		R533	RRD18XK103	10 k	**	u	1	
324	ERD25TJ102	1 k	1/4W	Carbon	1	S	R534	RRD18XK103	10 k	11	11	1	
401	RRD18XK473	47 k	1/8W	Chip	1		R537	RRD18XK332	3.3 k	· ·			
402	RRD18XK333	33 k	11	H T	ī		R538	RRD18XK332	3.3 k	11	**		
403	RRD18XK151	150	#	**	1		R539		1			1	
404	RRD18XK153	15 k	0	Ħ	1		3 1	RRD18XK273	27 k			1	
405	RRD18XK104	100 k	17	It	1		R540	RRD18XK273	27 k		11	1	
406	RRD18XK474	470 k	п	11			R541	RRD18XK273	27 k	"	11	1	
407	RRD18XK104	100 k		"	1		R542	RRD18XK273	27 k	"	"	1	
408	RRD18XK151	1		"	1		R543	RRD18XK474	470 k	"	n	1	
		150			1		R544	RRD18XK474	470 k	**	U	1	
409	RRD18XK333	33 k		H	1		R545	RRD18XK102	1 k	11	11	î	
410	RRD18XK153	15 k	**		1		R546	RRD18XK102	1 k	**	17	i	
411	RRD18XK474	470 k	"	"	1		R547	RRD18XK102	1 k	II.		1	

Ref. No.	Part No.	P	art Name & Description	Per Set	Remarks	Ref. No.	Part No.	Pa	rt Name &	& Description	Per Set	Remark
R548	RRD18XK102	l k	1/8W Chip	1		C21	ECOCOE 6 9 2Mg	0.068	50V	Polymator	1	
R549	RRD18XK221	220	1/0W CHIP	i		C22	ECQG05683MZ		50 V	Polyester		
		1	" "				ECKD1H102MD	0.001		Ceramic	1	
R550 R551	RRD18XK221	220	" "	1		C23	ECCD1H150KC	15 p			1	
R552	RRD18XK473	47 k		1		C101	ECUX1H221KD	220 p	"	Chip	1	
	RRD18XK473	47 k		1		C102	ECEA50Z1	1	"	Electrolytic	1	S
R553	RRD18XK333	33 k	" "	1		C103	ECQG05473MZ	0.047	"	Polyester	1	
R554	RRD18XK333	33 k	н н	1		C104	ECUX1H681KD	680 p	"	Chip	1	
R601	ERD25TJ1RO	1	1/4W Carbon	1	S	C105	ECUX1H681KD	680 p	"	n T	1	
R602	ERD25TJ1RO	1	0 0	1	S	C106	ECQS1H122KZ	1200 p	11	Styrol	1	
R603	ERD25TJ101	100	n u	1	S	C107	ECUX1H680KC	68 p	**	Chip	ĩ	
R604	ERD25TJ101	100	11 11	ī	S	C108	ECUX1H682MD	0.0068	н	Cp	1	
R605	ERD25TJ101	100	11 11	ı	S	C109	ECEA50Z2R2	2.2	n	Flootrolytia	1	S
R606	ERD25TJ101	100	" "			C111				Electrolytic		5
R607				1	S		ECUX1H271KD	270 p		Chip	1	
	ERD25TJ1RO	1		1	S	C112	ECUX1H271KD	270 p			1	
R608	ERD25TJ1RO	1		1	S	C113	ECUX1H271KD	270 p	11	11	1	
R701	ERX1ANJP2R2	2.2	lW Metal	1		C114	ECUX1H103MD	0.01	11	II .	1	
R801	RRD18XK104	100 k	1/8W Chip	1		C115	ECEA50Z1	1	11	Electrolytic	1	S
R802	RRD18XK102	1 k	u 11	1		C116	ECUX1H222MD	0.0022	11	Chip	ī	
R803	RRD18XK334	330 k	II II	1		C117	ECKD1H222MD	0.0022	н	Ceramic	1	
R804	RRD18XK153	15 k	11 11	1		C118	ECEAlES101	100	25V	Electrolytic	i	S
R805	RRD18XK101	100	11 11	1		C201	ECEA1CS221	220	16V	Frectiorytic	i	S
R806	RRD18XK103	10 k	n n	ī		C202				<b>D</b> 3		5
R807	RRD18XK103	10 k	" "				ECQG05473MZ	0.047	50V	Polyester	1	
R808			, ,	1		C203	ECQS05471JZ	470 p		Styrol	1	
	RRD18XK473	47 k		1		C204	ECQG05333MZ	0.033	11	Polyester	1	
R809	RRD18XK101	100	" "	1		C205	ECEA50ZR22	0.22	11	Electrolytic	1	S
R810	RRD18XK680	68	" "	1		C206	ECEA50ZR47	0.47	**	"	1	S
R811	RRD18XK101	100	11 11	1		C207	ECEA50Z1	1			1	S
R812	RRD18XK102	1 k	H 11	1		C208	ECQG05333MZ	0.033	17	Polyester	ī	J
R813	RRD18XK103	10 k	11 11	1		C209	ECEA50ZR47	0.47		Electrolytic	1	S
R814	RRD18XK103	10 k	" "	ī		C210	ECEA50ZR47	0.47		Electionitie		
R815	RRD18XK333	33 k	n n	ī					0.5**	11	1	S
R816	RRD18XK152	1.5 k	" "			C212	ECEALES470	47	25V	,,	1	S
R817				1		C213	ECEAlCSS471	470	16V	"	1	S
	RRD18XK222	2.2 k		1		C214	ECEA50ZR1	0.1	50V	"	1	S
R818	RRD18XK102	1 k	" "	1		C215	ECEA50Z1	1	"	11	1	S
R819	RRD18XK683	68 k	" "	1		C301	ECEA1HS100	10	"	11	1	S
		CADACIO	ODG (Value is in MIGDO			C302	ECEA1HS100	10	71	11	1	S
			ORS (Value is in MICRO			C303	ECEAlHS100	10	н		1	S
	D0001110001		except P.P=PICO FARADS	-		- C304	ECEA1HS100	10	11	11	ī	S
C1	ECEA1AS221	220	10V Electrolytic	1	S	7 C401	ECUX1H102MD	0.001	11	Chip	1	i J
C2	ECUX1H223ZF	0.022	50V Chip	1		C401	ECEA1HS100	10	11			C
C3	ECUX1H223ZF	0.022	11 11	1						Electrolytic	1	S
C4	ECUX1H223ZF	0.022	н н	1		C403	ECEALAS470	47	10V		1	S
C5	ECUX1H223ZF	0.022	11	ī		C404	ECEALAS470	47	**	"	1	S
C6	ECUX1H223ZF	0.022	11 11	ī		C406	ECUX1H682MD	0.0068	50V	Chip	1	
C7	ECEA25Z4R7	4.7	25V Electrolytic	l i	S	C407	ECEALAS470	47	10V	Electrolytic	1	S
C8	ECUX1H102MD	0.001	50V Chip	1	D	C408	ECEA1HS100	10	50V		1	S
C9			1		0	C409	ECEALAS101	100	10V	11	ī	S
	ECEALES470	47	25V Electrolytic	1	S	C411	ECUX1H682MD	0.0068	50V	Chip	i	_
C10	ECUX1H223ZF	0.022	50V Chip	1		C412	ECUX1H102MD	0.000	JU V	C11T P	1	
C11	ECUX1H333ZF	0.033	11 0	1						11		
C12	ECUX1H221KD	220 P	11	1		C413	ECUX1H221KD	220 p	11		1	
C13	ECEA50Z1	1	" Electrolytic	1	S	C414	ECUX1H221KD	220 p		11	1	
C14	ECEA25Z4R7	4.7	25V "	ī	S	C415	ECEA50Zl	1	11	Electrolytic	1	S
C15	ECUX1H223ZF	0.022	50V Chip	i	_	C416	ECEA50Z1	1	11	н	1	S
216	ECEA25N2R2	2.2	25V Electrolytic	1 1	S	C421	ECUX1H333ZF	0.033	11	Chip	1	
C18	\		4	1	5	C422	ECEAlHK010	1	l1	Electrolytic	ī	
	ECUX1H153MD	0.015	50V Chip	1		C423	ECEALEK4R7	4.7	25V	11	ī	
C19	ECUX1H333ZF	0.033	" "	1		C424	ECEA1EK4R7	3.3	50V	IT	1	
C20	ECUX1H103MD	0.01	H H	1								

Ref. No.	Part No.	Pa	rt Name &	& Description	Per Set	Remarks	Ref. No.	Part No.	Pa	rt Name	& Description	Per Set	Remarks
C425	ECEA1HK2R2	2.2	50V	Electrolytic	,		0612	ECENTACOOT	220	2000		1,	
C426				Electionistic	1		C613	ECEALAS 221	220	10V	Electrolytic	1	S
	ECEA1CK470	47 33	16V 10V		1 1		C614	ECEALAS221	220			1	s
C427	ECEALAK330		100				C615	ECQG05104MZ	0.1	50V	Polyester	1	
C428	ECEALAK470	47			1		C616	ECQG05104MZ	0.1		"	1	
C429	ECEA1CK470	47	16V		1	_	C617	ECEA1CS222	2200	16V	Electrolytic	1	S
C430	ECEAlES470	47	25V	- 3	1	S	C618	ECUX1H152MD	0.0015	50V	Chip	1	
C501	ECQG05473MZ	0.047	50V	Polyester	1		C619	ECUX1H152MD	0.0015	"	"	1	
C502	ECQG05473MZ	0.047	"	"	1	_	C620	ECUX1H152MD	0.0015			1	
C503	ECEA50Z1	1	"	Electrolytic	1	S	C621	ECUX1H152MD	0.0015			1	_
C504	ECEA50Z1	1			1	S	C701	ECEA1CS222	2200	16V	Electrolytic	1	S
C505	ECUX1H102ZF	0.001	"	Chip	1		C702	ECEA1CS222	2200	"	"	1	S
C506	ECUX1H102ZF	0.001	**		1		C801	ECUX1H330KC	33 p	50V	Chip	1	
C507	ECEA1HS100	10	11	Electrolytic	1	S	C802	ECUX1H331KD	330 p	**	"	1	
C508	ECEAlHS100	10	н	0	1	S	C803	ECUX1H153MD	0.015	11	"	1	
C509	ECUX1H332MD	0.0033	**	Chip	1		C804	ECUX1H221JD	220 p	11	**	1	
C510	ECUX1H332MD	0.0033	71	11	1		C805	ECUX1H103MD	0.01	0	U	1	
C511	ECQG05473MZ	0.047	n	Polyester	1		C806	ECUX1H153MD	0.015		11	1	
C512	ECQG05473MZ	0.047	11	11	1		C807	ECUX1H153MD	0.015	11	11	1	
C513	ECUX1H103MD	0.01	H	Chip	1		C808	ECEA1AK220	22	10V	Electrolytic	1	
C514	ECUX1H103MD	0.01	**	n-	1		C809	ECUX1H153MD	0.015	50V	Chip	1	
C515	ECEA50ZR22	0.22		Electrolytic	1	S	C810	ECUX1H333ZF	0.033	**	"	1	
C516	ECEA50ZR22	0.22		11	1	S	C811	ECUX1H153MD	0.015	**	11	ī	
C517	ECEA5021	1	*1	11	1	S	C812	ECUX1H153MD	0.015	***	11	Ιī	
C518	ECEA5021	1	*1	11	1	S	C813	ECEAlHK4R7	4.7	vi	Electrolytic	ī	
C519	ECEA1HS100	10	**	11	1	S	C814	ECUX1H680JC	680 p	11	Chip	l î	
C520	ECEA1HS100	10	11	· ·	1	S	C816	ECUX1H153MD	0.015	11	"	1	
C521	ECEA1AS221	220	10V	11	1	S	C817	ECEALAK330	33	10V	Electrolytic	1	
C522	ECUX1H153MD	0.015	50V	Chip	ī	_	C818	ECUX1H153MD	0.015	50V		i	
C523	ECUX1H153MD	0.015	"	"	ī		C819	ECUX1H153MD	0.015	30 V	Chip	i	
C524	ECEA1CSS471	470	16V	Electrolytic	ī	S	C821	ECUX1H151JD	150 p	11	"	i	
C525	ECQG05223MZ	0.022	50V	Polyester	ī	J	C822	ECUX1H681KD	680 p	71	"	i	
C526	ECQG05223MZ	0.022	"	" "	1		C823	ECUX1H681KD	680 p	71		l i	
C527	ECUX1H222MD	0.0022	17	Chip	ī		C824	ECUX1H101KD	0.001		"	1	
C528	ECUX1H222MD	0.0022	17	"	i		C825	ECUX1H102MD					
C529	ECEA1CS330	33	16V	Electrolytic	i	S	C826		680 p	1017		1	
C530	ECEA1HS100	10	50V	"	1	S	C827	ECEALAK470	47	10V	Electrolytic	1	
C531	ECEA1HS100	10	JU V	n	1	S		ECEALAK470	47			1	
C532	ECEA50Z1	1		n	1	S	C828	ECUX1H153MD	0.015	50V	Chip	1	
C533	ECEA50Z1	1 1	**		1	S	C830	ECUX1H153MD	0.015	7.0		1	
C534	ECEA50ZI	0.1	11	11	1	S	C831	ECEA1AK220	22	10V	Electrolytic	1	
C535	ECEA50ZR1	0.1		n	1	S	C832	ECUX1H330KC	33 p	50V	Chip	1	
C536	ECEA50MR33	0.33	11	n	1	S	C833	ECEA25N2R2	2.2	25V	Electrolytic	1	
C537	ECEASOMR33	0.33	11	n	1	S	C834	ECUX1H472MD	0.0047	50V	Chip	1	
C538	ECEAIAS471	470	10V	11	1	S	C835	ECEAlCK470	47	16V	Electrolytic	1	
C539	ECEATAS471	0.1	50V	"			C836	ECUX1H333ZF	0.033	50V	Chip	1	
C540	ECEA50ZR1	0.1	50 V	n .	1	S	C837	ECUX1H103MD	0.01	"	II .	1	
C601	ECQG05104MZ	0.1	50V	Delmanham	1	S	C838	ECUX1H471KD	470 p	**	n	1	
C601	ECQG05104MZ ECQG05104MZ	0.1	5UV	Polyester "	1		C839	ECUX1H333ZF	0.033	**	11	1	
C602	ECEA1AS221	220		Diambu-1	1		C840	ECCD1H121JC	120 p	**	Ceramic	1	
C604			10V	Electrolytic	1	S	C841	ECCD1H820K	82 P	**	H .	1	
C604 C607	ECEALAS221	220	"		1	S	I		CABINET	DADme			
C607	ECEALAS221	220	"		1	S	Kl	RYP2M310M					
	ECEALAS221	220			1	S			Panel As			1	
<i>G</i> 6 <i>09</i>	ECEY1Y2551	220	11	11	1	S	K2	RYP1M310XG	Deck Cov			1	
C610	ECEAlAS221	220	11	11	1	S	K3	RYT1M300N	Eject Bu			1	
C611	ECEA1CSS102	1000	16V	II .	1	S	K4	RGP575Y	Panel, A			1	
C612	ECEA1CSS102	1000	11	II .	1	S	K5	RGX1008Z	Cabinet	Frame,	Right Side	1	
					_		П		1				

Ref. No.	Part No.	Part Name & Description	Per	Remarks	Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
к6	RGX1008Y	Cabinet Frame, Left Side	1		E31	DDD0000	Dell'are Diel		
K7	RGX1097Z	Ornament, Right Side	1		E32	RDR9008Z RDZ05A	Roller, Dial	3	
K8	RGX1097Y	" Left Side	1		11532	RD203A	Cord, Dial	1	
K9	RUL596Z	Bracket, Panel	2		E33	RBC152Z	I .	ROLL	
K10	RDP208Z	Point, Dial	3		E34	RBC152Y	Button, Power	1 3	
K11	RBD63Z	Knob, Equalizer	3		E35	RBC153Z	" Band, Loudness etc. " Sens, Muting, etc.	5	
K12	RHM114Z	Spacer, Cabinet Frame	12		E36	RBN537Z	Knob, Balance, Fader	2	
K13	XTB3+10CFZ	Screw, Deck Cover M'tg	2		E37	RBN538Z	" Volume	1	
K14	XTB3+16CFZ	" Panel (Ant. Trim) M'tq	2		E38	RHG219Z	Rubber, Pilot Lamp	2	
K15	XTW3+12F	" Cabinet Frame M'tq	12		E39	RMP123Z	Holder, LED	1	
K16	XTW3+12FR	Red Screw, Panel M'tg	7		E40	RMP124Z	" "	i	
K17	XTW3+8FR	" Deck Cover M'tg	2		E41	RMC684Z	Shield Cover	1	
K18	RGT764W8	Name Plate	1		E42	XSN3+14BVS	Screw, Power IC M'tg	4	s
K19	RQT4241X	Caution Sheet	1		E43	XSN3+5S	" Deck, Eject Switch M'tq		S
K20	RUA388Z	Rear Mounting Bracket	1		E44	XWA3B	Washer	6	S
K21	RUL595Z	Bracket, Cabinet Frame, Left	1		E45	XTN3+8B	Screw, Dial Back Plate etc.		
K22	RUL595Y	" " Right	1		][=		M'tq	15	s
K23	RHG307A	Cover, Ant. Trim	1		E46	XTN3+10B	Screw, PC Board M'tg	1	s
K24	XTB3+8BFZ	Screw, Deck Bracket M'tg	2		E47	XSN3+6S	" Deck PC Board M'tg	2	S
		DOME LAMP			E48	XWG3	Washer, Deck PC Board M'tg	2	S
к25	RYMLM610M7	Cabinet Assembly, Dome Lamp	1		E49	XTW3+6F	Screw, Pointer Guide etc. M'tg		
к26	RGX1039Z	Lamp Cover	l i l		E50	XTW3+6FR	Red Screw, Tape Deck M'tg	6	
K27	RBD107Z	Knob, Lamp Switch	ī		E51	XTW3+8F	Screw, Heat Sink M'tq	8	
					E52	XWC3B	Washer	8	S
		ELECTRICAL PARTS			E53	XNS8D	Nut, Volume M'tg	3	
El	RYT2M300N	Button Assembly, FF, REW	1		E54	RMR75Z	Bracket, Volume	3	
E2	RBN539Z	Knob, Tuning	1						
E3	RYEM310M	Dial Back Plate Assembly	1		E55	VAMDZOM	DOME LAMP		
E4	RSD18Z	FM Tuner	1		E56	XAMR70T RJS205Y	Dome Lamp	2	
E5	XAMR50S400	Pilot Lamp, 12V, 0.03A	2		E57	RJP107Z	Socket, Lamp	2	
E6 E7	RJP133Z	Plug, 3 Pin, CP22	1		E58	RUL408Z	Plug,	1	1
E8	RJP134Z RJP136Z	" 4 Pin, CN2	1		1 230	KOD400Z	Bracket, Socket	1	
E9	RJP136Z RJP142Z	3 1 111	1				ACCESSORIES		
E10	RJP142Z	" 6 Pin, CN3 " 6 Pin,	1		Al	WRRA-30XX	Dome Lamp Extension Wire	1	
Ell	RJP119Z	" 7 Pin, CP21	1 1		A2	WRRH-30XX	U U	1	1
E12	RJP204Z	" SP, Power	1		A3	RHR131Z	Wire Nut	12	ĺ
E13	RJS253X	Socket, 3 Pin	1 1		A4	RKC61Z	Front Mounting Plate	1	Í
E14	RJS216X	" 4 Pin	2		A5	RKC61Y	"	1	Í
E15	RJS217X	" 5 Pin	2		A6	RKE320Z	Front Plate Cover	1	i
E16	RJS112X	" 6 Pin	2		A7	RKC51X	Rear Mounting Plate	1	i
E17	RJS219X	" 7 Pin	1		A8	RYED61001M	Rear Extension Plate	1	i
E18	RJT462Y	Terminal, Socket	40		A9	RKE319Z	Padded Rear Cover	1	ı
E19	RJS163Z	Socket, Antenna	1		A10	RHR980Z	Wire Protector	1	
E20	RJT433Z	Terminal, Eject Switch	2		A11	RHR1088Z	Foam Spacer	2	i
E21	RJT663Z	Spring, Eject Switch	ī		A12	XSN4+8C	Screw	8	S
E22	RJT665Z	Connector, 3 Pin,	-		A13 A14	XWA4B	Washer	8	S
		CN10∿12, 14∿16, 20	7		A14 A15	XTN5+12AFX	Self Tap Screw	2	
E23	RJT666Z	Connector, 5 Pin, CN13	i		A16	XTN5+16B	, , , , , , , , , , , , , , , , , , ,	2	S
E24	RJT667Z	" 7 Pin, CN19	ī		A15 A17	XTN5+20AFZ XTB4+16AFN		2	
E25	RJT668Z	" 10 Pin, CN18	1		A18	XWG4	Flat Washer	1	C
E26	RJT671Z	" 4 Pin, CN17	ī		A19	XWG5F16	Flat Washer	8	S
E27	RMX159Z	Insulator	2		A20	XWA5B	Lock Washer	6	S
E28	RMX160Z	n	ī		A21	XNG5ES		4	S
E29	RDS3090A	Spring, Dial	1		A21 A22	RME202Z	Hex. Nut Wire Clamp	4	S
E30	RDP207Z	Pointer, Dial	ī		A23	RME188Z	wire Clamp	3	
		,	_		1123	METOOP		6	
	<del></del>				J	1			

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
A24	RHR993Z	Wire Clamp	6	
A25	XBA1E60NS5	Fuse	2	
126	RJT687Z	Male Adaptor Terminal	ĺ	
127	RJT686Z	Male Adaptor Terminal	ı	
128	RWAM310M	Power Cord Assembly	1	
129	RJP177Z	Antenna Cord	1 1	
A30	RWN1M310M		Τ.	
A31	RWN2M310M	Speaker Connector Assembly, (Front SP) Speaker Connector Assembly,	1	
151	KWINZPISTOPI	(Rear SP)	1	
A32	XTB3+10CFZ	Self Tap Screw	4	
A33	RJT218Z	Terminal	1	
-		PACKING MATERIALS		
21	RPN9344Z	Pad Complete	1	
P2	RPK1249Z	Gift Box	1	
P3	RPG2467Z	Carbon Box	1	
P4	RPK818Z	Box	1	
₽5	RPN2927Z	Pad	1	
≥6	RPH322Z	Soft Sheet	1	
P7	RPP258Z	Polyethylene Cover	1	
28	XZB20X40A04	Polyethylene Cover	1	S
29	XZB10X15A04	Polyethylene Cover	ī	S
		PRINTED MATERIALS		
Yl	RQX6819Z	Instruction Book	1	
72	RQX9272Z	Instruction for Mounting	1	
73	RQX9257Z	Caution Sheet	1	
74	RQE18Z	Caution Tap	1	